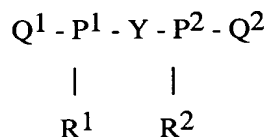


**Abstract**

New peptide-based gemini compounds comprising two linked chains:



each chain having:

- (1) a positively charged hydrophilic head,  $Q^1$  or  $Q^2$ , formed from one or more amino acids and/or amines
- (2) a central portion,  $P^1$  or  $P^2$ , having a polypeptide backbone, and
- (3) a hydrophobic tail,  $R^1$  or  $R^2$ ,

the central sections of each chain being linked together by bridge Y through residues in  $P^1$  and  $P^2$ ,

are disclosed.

Methods for their preparation and uses are also disclosed. Such uses include transfection of polynucleotides into cells *in-vivo* and *in-vitro*.